

REMARKS

The Office Action mailed on July 07, 2003, has been reviewed and the comments of the Patent and Trademark Office have been considered. Prior to this paper, claims 1 and 3-12 were pending in the present application. By this paper, Applicants do not cancel any claims, and add claims 13-18. Therefore, claims 1 and 3-18 are now pending in the present application.

Applicants respectfully submit that the present application is in condition for allowance for the reasons that follow.

Telephone Interviews Prior to the Mailing of the Present Office Action

Applicants thank examiner Savage for extending the courtesy of a series of telephone interviews to Applicants' representatives prior to the mailing of the Office Action.

Suggestion of Allowable Subject Matter

Applicants thank examiner Savage for identifying subject matter that would place claims 1 and 10 into allowance if incorporated therein. (i.e., the recitation of fiber lengths discussed in GB 1,190,844, a reference cited and relied on in the specification to teach production of webs.)

Rejections Under 35 U.S.C. §§ 102/103

Independent claim 1 stands rejected under 35 U.S.C. §102(b) as being anticipated by Ishibe (EP 0 561 001) and under 35 U.S.C. §103(a) as being obvious in view of Ishibe. Independent claim 10 stands rejected under 35 U.S.C. §103(a) as being obvious over Ishibe in view of De Bruyne (USP 4,983,467.) The dependent claims stand rejected variously as being

anticipated or obvious in view of the just cited references. Applicants respectfully traverse all of the rejections.

Claim 1 and its Dependencies

In regard to independent claim 1, Applicants rely on MPEP § 2131, entitled “Anticipation – Application of 35 U.S.C. 102(a), (b), and (e),” which states that a “claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference,” and MPEP § 2143, which states that “the prior art reference (or references when combined) must teach or suggest all the claim limitations.” It is respectfully submitted that Ishibe does not describe each and every element of claim 1.

Claim 1 recites that the layered filtering structure comprises a plurality of layers, “*each* layer comprising a *web* of metal fibers,” “said two layers being in contact with each other.” (Emphasis added.) One of ordinary skill in the art, after reading Applicants’ specification, would immediately recognize that the “webs” of claim 1 are separate structures of metal fibers that can be handled separately and then brought into contact with each other. By way of example, such a structure could be a membrane or tissue of metal fibers. Still further, one of ordinary skill would recognize that the claimed webs form an assemblage of long metal fibers, since powders, particles and short metal fibers will not sufficiently overlap to form a web structure.

In contrast, Ishibe does not teach a plurality of layers *each* comprising a *web* of metal fibers. Ishibe does teach a filter having two layers, but at most only teaches that one of the layers is a layer comprising a web. In Ishibe, the filter comprises 1) a support layer, and 2) a particle layer. True, Ishibe teaches that the support layer can be formed from a sintered body of long fibers, and thus Applicants will assume *arguendo* that the support layer is a web. However, Ishibe teaches that, in contrast, the particle layer is formed from metal powder or short fibers. (Ishibe, page 5, line 57.) That is, Ishibe teaches that one of the layers is a particle layer, and does not teach or suggest that the layer is a web of metal fibers. Indeed, Ishibe cannot teach that the particle layer is a web of metal fibers, since Ishibe only teaches

that particles, powders, and short metal fibers are used to make up one of the layers and, as noted above, one of ordinary skill in the art would recognize that powders, particles and short metal fibers will not sufficiently overlap to form a web structure.

Still further, Ishibe teaches away from a plurality of separate webs, as the particles, powders, and "short fibers" of the particle layer are merely deposited onto the support layer. In Ishibe, deposition is accomplished by immersing the support layer of Ishibe (which can be formed from long fibers) in a suspension of particles and evacuating the suspension through the support layer. As the support layer "filters" the particles from the suspension, the particles accrete on the support layer, and a second layer is thus formed. However, this is not the same as forming a separate web. Still further, Applicants respectfully submit that the deposition method of Ishibe would not work properly with a suspension of long fibers. Thus, Ishibe does not teach a second web.

Because Ishibe teaches that only one layer can be a web of metal fibers, Ishibe fails to teach each and every element of claim 1.

* * * * *

Applicants note that in the April 2003 Office Action, it was held that "layer 3 [of Ishibe] constitutes a web in the sense that a continuous roll of paper of which includes short fibers can also be considered a web" and that "no particular fiber length has been recited." (April 2003 Office Action, page 5, first paragraph.)

In response, Applicants respectfully submit that, assuming *arguendo* a roll of paper is a web, one of ordinary skill in the art would not view paper as a web made from "short fibers," as "short fibers" would be understood by one of ordinary skill in the art after reading the disclosure of Ishibe, because the "short fibers" of Ishibe are very short. On page 8, lines 15-16, Ishibe teaches that "the particle layer 3 is formed from the particles comprising metal short fibers with the diameter of 2.5 μm and the aspect ratio of 6." Applicants submit that one of ordinary skill would read this to mean that the fiber length is about 15 μm (2.5 x 6), **or 0.015 mm**. (Again, the "short fibers of Ishibe are supposed to take the place of powders and particles, so such a small size is not surprising.) It is believed the alleged webs

of a roll of paper are made from fibers of significantly longer size and that a web could not be made from fibers only 0.015 mm in length. Still further, as noted above, the particle layer containing the "short fibers" is accreted on the support layer. That is, as its name implies, the support layer *supports* the particle layer, and Applicants respectfully submit that no evidence has been put forward that the particle layer of Ishibe can be handled or even exist separately from the support layer (in contrast to a "web" of paper). Thus, Applicants respectfully submit that the analogy to the paper making arts is not sufficient to maintain the rejection.

The April 2003 Office Action correctly notes that claim 1 does not contain an explicit recitation of fiber lengths. However, Applicants respectfully submit that one of ordinary skill in the art, after reading Ishibe, would recognize that a web is not (it cannot be) formed in Ishibe from the "short fibers" of Ishibe in its particle layer, and thus, at most, Ishibe can only teach one web.

* * * * *

Claims 3-9, claims that depend from claim 1, stand rejected as being either anticipated by Ishibe or as being obvious in view of Ishibe when combined with various other references. Applicants respectfully submit that since Ishibe does not teach each and every element of claim 1, and none of the other cited references remedy the deficiencies of Ishibe, these claims are likewise allowable.

Claim 10 and its Dependencies

As noted above, independent claim 10 also stands rejected as being obvious over Ishibe in view of De Bruyne. Applicants respectfully submit that because claim 10 recites a plurality of webs, the claim is allowable for the same reasons that make claim 1 allowable, as discussed above. Specifically, Ishibe does not teach a plurality of webs in contact with one another, and De Bruyne fails to remedy this deficiency of Ishibe. Thus, claim 10 and claims 11-12 (the claims that depend from claim 10) are allowable for at least this reason. Reconsideration is respectfully requested.

New Claims

As seen above, Applicants have added new claims. These claims are allowable for at least the reason that they depend from either claim 1 or claim 10, claims that are allowable. Further, claims 13-16 rely on the subject matter identified in the Office Action as being novel in view of the cited references. Claims 17 and 18 recite that the action of bringing the layers together to contact each other occurs *after* the second layer is formed/provided, and, since Ishibe teaches that the second layer is formed (accreted) on the first layer, these claims are allowable for at least this additional reason.

Conclusion

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.


The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Examiner Savage is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

Respectfully submitted,

Date 098 07, 2003

FOLEY & LARDNER
Washington Harbour
3000 K Street, N.W., Suite 500
Washington, D.C. 20007-5143
Telephone: (202) 295-4747
Facsimile: (202) 672-5399

By 
Martin J. Cosenza
Attorney for Applicant
Registration No. 48,892